DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024035 Address: 333 Burma Road **Date Inspected:** 20-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 13AE, Bearing Block Assembly (for Anchor Bolt Seat) at OBG Trial Assembly

This QA Inspector performed Dimension Control Inspection on the Bearing Block Assembly (for Anchor Bolt Seat) at OBG Trial Assembly for Segment 13AE at the following locations along with ABF QA Mr. Wang at E3 locations. The Inspection was performed against the Notification # 09188 dated May 20, 2011.

Bearing Blocks are installed at PP 119 (-1500mm), Total 4 locations at West side of the Floor Beam.

Bearing Blocks are installed at PP 119 (-1500mm), Total 4 locations at East side of the Floor Beam.

Bearing Blocks are installed at PP 119 to PP 119(-1500mm), Total 4 locations at center of both the panel points.

Bearing Blocks are installed at PP 119, Total 2 locations at West side of the Floor Beam.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Bearing Blocks are installed at PP 119, Total 2 locations at East side of the Floor Beam.

Bearing Blocks are installed at PP 119 to PP 119(+1500mm), Total 4 locations at center of both the panel points.

Bearing Blocks are installed at PP 119 (+1500mm), Total 4 locations at West side of the Floor Beam.

Bearing Blocks are installed at PP 119 (+1500mm), Total 4 locations at East side of the Floor Beam.

Dimension inspection was performed after passing the anchor rod at between the holes of Bearing Block to Bottom Plate and recorded the various measurements as following.

Gap between the Bearing Blocks to Floor Beam.

Mill to Bear (MTB) measured between the Stools to Bearing Block.

Mill to Bear (MTB) measured between the Stools to Bottom Plate.

Segment 13AE, Bearing Block Assembly (for Anchor Bolt Seat) at OBG Trial Assembly

This QA Inspector performed Dimension Control Inspection on the Bearing Block Assembly (for Anchor Bolt Seat) at OBG Trial Assembly for Segment 13AE at the following locations along with ABF QA Mr. Wang between work point E3 and E4 locations. The Inspection was performed against the Notification # 09188 dated May 20, 2011.

Bearing Blocks are installed at PP 119 (-1500mm), Total 6 locations at West side of the Floor Beam.

Bearing Blocks are installed at PP 119 (-1500mm), Total 2 locations at East side of the Floor Beam.

Bearing Blocks are installed at PP 119(-1500mm) to PP 119, Total 4 locations at center of both the panel points.

Bearing Blocks are installed at PP 119(+1500mm) to PP 119, Total 4 locations at center of both the panel points.

Bearing Blocks are installed at PP 119 (+1500mm), Total 2 locations at East side of the Floor Beam.

Bearing Blocks are installed at PP 119 (+1500mm), Total 6 locations at West side of the Floor Beam.

Dimension inspection was performed after passing the anchor rod at between the holes of Bearing Block to Bottom Plate and recorded the various measurements as following.

Gap between the Bearing Blocks to Floor Beam.

Mill to Bear (MTB) measured between the Stools to Bearing Block.

Mill to Bear (MTB) measured between the Stools to Bottom Plate.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Note: During the process of Dimensional Inspection observed welder # 067148 performing fillet welding to the Bearing Block (200mm thick) to the Floor Beam at PP 119 (-1500) West side, observed 1mm gap between the vertical stool top face to the bearing block, it was confirmed by sliding the 1mm thick steel ruler inside the faying surface.

Informed the observation to the Caltrans Lead Inspector Mr. Rodney Patterson and Mr. Mark Miller and Mr. Wang of ABF. The welding was stopped after observing 1mm gap after fillet welding. Thus observed gap not in compliance with the contractual requirement.

Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.







Summary of Conversations:

No relevant conversations were reported on this date.

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

your project.

Inspected By: Math, Manjunath Quality Assurance Inspector

Reviewed By: Miller,Mark QA Reviewer